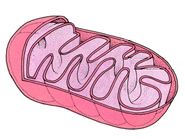
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**Questions to Go Along with the Unit 6 Notes, Part 2 – Aerobic Cellular Respiration**

Ms. OK, AP Biology, 2014-2015

1. What are the reactants and products of aerobic cellular respiration?
2. Why / how does the breakdown of ATP release energy?
3. How does the breakdown of ATP relate to energy coupling?
4. Where does cellular respiration take place in a prokaryotic vs. eukaryotic cell?
5. Label the following parts of the mitochondrion pictured below: outer membrane, inner membrane / cristae, matrix, and intermembrane space.



1. How does cellular respiration relate to energy coupling?
2. What is an oxidation reduction reaction? Why do we use the memory trick OIL RIG to remember what occurs during an oxidation reduction reaction?
3. Do your best to fill in the chart given on the back of this page to describe the steps of cellular respiration: glycolysis, the conversion of pyruvate to acetyl CoA, the Krebs cycle, and the electron transport chain.
4. If the membrane protein pumps of the electron transport chain are defective and cannot pump H+ into the intermembrane space, how will this affect the amount of ATP created during the electron transport chain? Explain your answer.
5. Is glucose the only molecule that can be broken down during cellular respiration to create ATP? Explain your answer.